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ABSTRACT

This descriptive study investigates the uses of SMART Board, an interactive electronic whiteboard, in secondary school foreign language classes. The paper first discusses how SMART Board can facilitate the teaching process. SMART Board supports the foreign language teaching process in three main ways: it helps the presentation of new linguistic and cultural elements; it supports interaction with the class; and it promotes the teacher's organizational skills. The second part is dedicated to a more detailed analysis of the various uses of SMART Board from the point of view of the student. Activities support the learning process in terms of oral skills, the cognitive process, and students' motivation and emulation. Finally, the weaknesses of this tool are identified. This study may show the potential value of this tool in foreign language acquisition. (Contains 17 references.) (Author/AEF)

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Using SMART Board in Foreign Language Classes

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Abstract: This descriptive study investigates the uses of SMART Board in foreign language classes. The paper first discusses how SMART Board can facilitate the teaching process. The second part is dedicated to a more detailed analysis of the various uses of SMART Board from the point of view of the student. Finally, the weaknesses of this tool will be identified. The study may show the potential value of this tool in foreign language acquisition.

Introduction

Cary Academy is a new independent school situated in a booming area of North Carolina called The Research Triangle. In this 6-12 school, teaching and learning are based on the use of technology. Each foreign language classroom is equipped with one networked computer for every student, and several SMART Boards were introduced in the classroom during the first operational year (997-98).

This paper describes and analyzes the use of SMART Board in foreign language classrooms. We will first discuss SMART Board from a teaching point of view - how SMART Board can facilitate the teaching of a foreign language. We will then look closer at the activities using SMART Board from a student's perspective -- how those activities may encourage and facilitate the learning process of a foreign language. And finally, the weaknesses of this tool will also be identified.

We will start by giving some information on SMART Board itself.

I - The Features of SMART Board

SMART Board is an interactive electronic whiteboard. This board is connected to a computer and to a projector that displays the image of a computer screen. SMART board works through a piece of software that allows the users to use SMART Board for different purposes. To enhance the board you first need to start the software and then to orient the board. Once that is done, you are ready to begin…

By projecting the computer screen onto the SMART Board the user can control all Windows applications using his finger on the board just as he would use a desktop mouse. He only needs to press the board's surface to open and close files, explore web sites on the Internet etc.

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As with a regular white board, the user can take notes on SMART Board. These can be printed and/or saved like any another document.

Those are the two main features of the board. Let's see now what kind of activities Smart Board offers to foreign language instruction.

II - Activities involving SMART Board in the Foreign Language Classes

We will now analyze the activities proposed in our foreign language classes from two different points of view: that of the teacher, and that of the student.

A- Activities Which Support Teaching

SMART Board supports the teaching process of foreign languages in three main ways: 1) it helps the presentation of new linguistic and cultural elements, 2) it supports interaction with the class and 3) it promotes the teacher's organizational skills.

1) Activities Supporting the Presentation of New Linguistic and Cultural Elements

SMART Board is basically a support on which the teacher can project what he displays on his screen. The prime use of SMART Board in the foreign language classroom is to present new linguistic and cultural elements.

SMART Board allows teachers to prepare and then to present a lesson (grammar, for instance) on a Notebook document. One advantage of such a presentation on SMART Board is that the instructor can make use of the varied writing features to overwrite, underline, highlight or circle the elements he wants the students to focus on. Another advantage is that the document is typed and therefore very readable. It can also be saved and displayed at any time again.

The writing features of SMART Board also make a difference when presenting authentic documents (web sites). It enables the teacher to explore the document in depth, rather than staying at a simple presentation level. BACON/ FINNEMANN (1990) and ALLEN, BERNHARDT/ BERRY, DEMEL (1988) suggested in their studies the positive influence of authentic documents in language learning. With SMART Board the instructor can not only project a web site, he also can overwrite it to emphasize linguistic elements (vocabulary, idioms, structures etc) and specific cultural elements. SMART Board also facilitates navigation of the site. The finger-driven navigation has a tremendous advantage for foreign language classes in that it supports interaction within the classroom.

2) Activities Supporting Interaction with Students

A projection onto SMART Board is very different from a classic projection: it allows the teacher to navigate from the board. The instructor does not have to go to his computer, turn his back to the class, and be more focused on the technology than on the learning process of the students. This point is very important when using SMART Board to teach and is crucial in foreign language classes. Every foreign language teacher knows how difficult it is to have a relaxed conversation with students in the target language. The projection makes it easier to start a conversation on a topic since it allows a group to watch a document at the same time and focus on the same point of the classroom. The merit of SMART Board is that it enhances conversation: when the teacher is navigating the document from the board, he faces and interacts with the class. It allows the instructor to focus on the students' language production and conversations, not on technical issues.

SMART Board also supports communication when it is combined with a wireless keyboard. The teacher sits with the students, reading a text or a having conversation. Suddenly, new vocabulary is needed or appears in the conversation. Instead of breaking the conversation by standing up, going to the board and writing the new word, the teacher can type it with the wireless keyboard onto the SMART Board Notebook. The students do not have to worry about the vocabulary right away. At the end of the activity, the teacher can reinforce those new words by underlining, highlighting or circling important linguistic aspects (articles or prepositions) or conjugations. This document can then be printed for the students and saved for the teacher.

3) Activities Supporting Teacher Organization

Keeping track of vocabulary introduced in class is a major organizational issue in foreign language teaching, especially in more advanced classes. The feature of SMART Board that allows the teacher to save the notes written on the board during the class supports this process tremendously. It helps teachers to remember those words and promotes their reinforcement: the teacher knows exactly the new elements he has introduced and is better able to work on reinforcing each of them.

B -Activities supporting the Learning Process

1) Activities Supporting Oral Skills

PENNINGTON (1996, 10) noticed "that the computer can sometimes encourage a form of 'anti-social' behavior that amounts to working in isolation from others". A common criticism of computer use, this is especially relevant in the context of foreign language classes because we are supposed to interact as much as possible in the target language. The introduction of the projector associated with SMART Board brings this problem into a new perspective. Presented to the whole class, a web document enhances oral interaction in the classroom and opinions or ideas will be exchanged. As suggested for group activities using the computer (Abraham and Liou 1991; Chapelle, Jamieson and Park 1996), SMART Board brings people together and encourages communication.

Besides the fact that the whole class may interact regarding a particular web site, there also exists the possibility of assigning a student to navigate a site on SMART Board. The other students must guide him by giving directions according the assignment related to the specific page. Every interaction takes place in the target language.

It is also possible to have students present projects on SMART Board. They are able to present and speak about the subject without having to concentrate on the mouse. Pictures and text are shown without delay with a simple finger touch on the board to support what they have to say. This places oral production in the target language in the foreground.

2) Activities Supporting the Cognitive Process

SMART Board supports and enhances the learning process in many ways.

One basic feature of SMART Board is the possibility of overwriting any projected document. This allows the students to know exactly what they need to focus on. It helps them to not get lost and to always know exactly what the teacher wants them to select from the document. If the teacher wants to emphasize any particular structure used on a web page, he can underline it with different colors. The various overwriting possibilities presented by SMART Board (colored underline, highlighting, circling) help the students to organize the new concepts. It is a valuable visual learning tool.

SMART Board does not just *support* learning. According to PAPERT, we generally think that "in the presence of computer, cultures might change and with them people's ways of learning and thinking." (PAPERT 1987, 23). More specifically, Pennington (1996, 3) pointed out that the computer has the potential to *change* the processes involved in foreign language learning. SMART Board may have this potential too. Used to accomplish certain activities, SMART Board may enhance new kinds of learning processes. We

specifically refer here to activities requiring the use of two windows. These kinds of activities use a first window displaying an original web page in the target language, and a second window showing the teacher's instructions on this web document (what the student has to look for or to discover on the site etc.). Studies are required to support this hypothesis.

Writing a paper on French Guyana does not require the same skills as preparing a web based presentation on the same subject. We already have paper and books to write and read extensive texts. To simply reproduce a text on a web document does not make any sense at all. The web has to bring some new features to the content. One of the unique features of a web document is that it is non-linear: the use of links allows a text to have different levels.

A presentation supported by SMART Board requires the student to prepare his project according to the features of the tool that will support it. In an electronic context, this means to use links. Creating links to present a paper requires the student to organize his ideas and the content of what he has to say. It requires him to have a paper structured in different parts. The organization required by this type of presentation may encourage him to make a learning habit out of this discipline. As Chapelle and Jamieson (1996) suggested, "It seems that the type of metacognitive strategies Oxford (1990) defines - e.g., organizing, setting goals and objectives, planning for a language task - would be essential for learners working in CALL environments".

Another activity supported by SMART Board is the correction a paper by the whole class. Students can look at the papers of other students, giving them an opportunity to look at their own paper with another perspective. It may help failing students to understand better what the teacher is expecting. It is also a nice way to reward good papers.

Beside the direct or indirect general feedback that every student gets, correcting a paper on SMART Board gives everyone the possibility of working on improving language skills. Students may look for spelling mistakes, correcting them by overwriting the paper projected on the Board. This kind of correction helps students to get an eye for the language. Trying to figure out what is correct or incorrect in a language requires the students to be more aware of linguistic elements. This type of activity has impacts not only the person who produces the work but also on the group working at its improvement.

3) Activities Supporting Students' Motivation and Emulation

Students like to work on SMART Board! They are all excited about this board that you just need to touch to use. They especially love to write with their fingers, so even activities like quizzes are fun on the electronic board! They ask to be quizzed, only for the fun of writing on the board. This magic board brings true excitement in the classroom.

Many studies show how much this excitement and positive attitude is important for learning. From a hormonal point of view, the learning process cannot be started without a student's positive attitude. Vester (1994, 73) affirms that the emotional and psychological state of the student, via hormonal activity, is crucial. He explains it this way: a "negative hormonal state" provoked by stress, fear, pain ... provokes the production of the 'stress' hormone (adrenaline) which blocks the synapses activities and the ionic exchanges necessary to the mental process cannot take place. That students have to be in a "positive hormonal situation" to be able to learn. Using SMART Board gives them a positive attitude.

C - Some Problematic Aspects

The problems encountered with SMART Board are not specific to foreign language teaching but are more general problems. The technical issues we underline in this part may be specific to the use of SMART Board in an educational setting.

The first that issue teachers need to be aware of is that the orientation of the board is crucial to be able to use SMART Board properly. This has to be done carefully and nothing can be moved from at all in order to get

an optimal reaction of SMART Board when using the fingertips. Nobody should touch the projector or the cart that contains the projector. If you use a portable board, you must make sure that you have blocked the wheels. If the orientation has not be done properly or if someone has moved one of the elements involved in the projection onto SMART Board, you will waste your class time.

Another technical aspect is related to the pens of SMART Board. The place where the pens lay is electronically connected to the system so that it can recognize when a pen has been taken. This means that if you forget to put back a pen to its place, the board will interpret that you want to write with that pen, and whatever you do on the board will be written there. You will be unable to navigate if all the pens and erasers are not covering their electronic fields.

Another small issue relevant in an educational setting, especially when interacting with young students, is the quality of writing. When students are learning a language, they often cannot connect the new words to their sound system. It is important that the students be able to see a very clear spelling of the new words.

Conclusion

This analysis of SMART Board in the foreign language classroom has underlined the gains and possible problem sources for classroom use.

Our impression is that SMART Board is a very innovative and powerful support for language acquisition. First of all, it provides a bridge that allows using the features of computers without breaking *communication*, -- it even supports it. Secondly, it may enhance new kinds of learning processes, for instance when working with two windows.

On the practical side, SMART Board offers a very interesting option for bringing the Internet into every FL class. The Internet, and the access it provides to authentic documents, is the biggest revolution in foreign language teaching/learning in the last few years. SMART Board brings this interactive feature into the classroom without involving the cost of having one online computer for every student in the classroom.

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